The International Journal of
Robotics Research

Author Index Volumes 6 to 10

Abdel-Rahman, T. M. A generalized practical method for analytic solution of the constrained inverse kinematics problem of redundant manipulators 10:4 pp. 382–395.

Agapakis, J. E. Approaches for recognition and interpretation of workpiece surface features using structured lighting 9:5 pp. 3–16.

Agapakis, J. E., Katz, J. M., Friedman, J. M. and Epstein, G. N. Vision-aided robotic welding: an approach and a flexible implementation 9:5 pp. 17–34.

Alexander, J. C. and Maddocks, J. H. On the kinematics of wheeled mobile robots 8:5 pp. 15–27.

Alexander, R. McN. Three uses for springs in legged locomotion 9:2 pp. 53–61.

Allen, P. K. Integrating vision and touch for object recognition tasks 7:6 pp. 15–33.

Amin-Javaheri, M. and Orin, D. E. Parallel algorithms for computation of the manipulator inertia matrix 10:2 pp. 162–170.

An, C. H. and Hollerbach, J. M. The role of dynamic models in Cartesian force control of manipulators 8:4 pp. 51–72.

Anderson, K. and Angeles, J. Kinematic inversion of robotic manipulators in the presence of redundancies 8:6 pp. 80–97.

Angeles, J. and Ma, O. Dynamic simulation of n-axis serial robotic manipulators using a natural orthogonal complement 7:5 pp. 32–47.

Arkin, R. C. Motor schema-based mobile robot navigation 8:4 pp. 92–112.

Armstrong, B. On finding exciting trajectories for identification experiments involving systems with nonlinear dynamics 8:6 pp. 28–48.

Aronov, B., Fortune, S. and Wilfong, G. Minimum-speed motions 10:3 pp. 228–239.

Ayache, N. and Faugeras, O. D. Building, registrating and fusing noisy visual maps 7:6 pp. 45–65.

Bajaj, C. and Kim, M.-S. Generation of configuration space obstacles: moving algebraic surfaces 9:1 pp. 92–112.

Bajaj, C. and Moh, T. T. Generalized unfoldings for shortest paths 7:1 pp. 71–76.

Baker, D. R. and Wampler, C. W. On the inverse kinematics of redundant manipulators 7:2 pp. 3–21.

Barraquand, J. and Latombe, J.-C. Robot motion planning: a distributed representation approach 10:6 pp. 628–649.

Basu, A. and Aloimonos, J. A. robust, correspondenceless, translation-determining algorithm 9:5 pp. 35–59.

Bayo, E., Papadapoulos, P., Stubbe, J. and Serna, M. A. Inverse dynamics and kinematics of multi-link elastic robots: an iterative frequency domain approach 8:6 pp. 49–62.

Baz, A. and Gumusel, L. Buoyancy- and gravity-powered underwater robots 9:5 pp. 60–69.

Berger, A. D. and Kholsa, P. K. Using tactile data for real-time feedback 10:2 pp. 88–102.

Bobrow, James E. A direct minimization approach for obtaining the distance between convex polyhedra 8:3 pp. 65–76.

Borm, J.-H. and Menq, C.-H. Determination of optimal measurement configurations for robot calibration based on observability measure 10:1 pp. 51–63.

Brost, R. C. Automatic grasp planning in the presence of uncertainty. 7:1 pp. 3–17.

Buchal, R. O., Cherchas, D. B., Sassani, F. and Duncan, J. P. Simulated off-line programming of welding robots 8:3 pp. 31–43.

Buckley, Charles E. A foundation for the "flexible-trajectory" approach to numeric path planning 8:3 pp. 44–64.

Buckley, S. J. Planning compliant motion strategies 8:5 pp. 28–44.

Burger, W. and Bhanu, B. Qualitative understanding of scene dynamics for mobile robots 9:6 pp. 74–90.

Byrd, J. S. and DeVries, Kevin R. A six-legged telerobot for nuclear applications development 9:2 pp. 43–52.

Cameron, A. and Durrant-Whyte, H. F. A Bayesian approach to optimal sensor placement 9:5 pp. 70–88.

Cameron, S. Efficient intersection tests for objects defined constructively 8:1 pp. 3–25.

Canudas de Wit, E., Noel, P., Aubin, A. and Brogliato, B. Adaptive friction compensation in robot manipulators: low velocities 10:3 pp. 189–199.

Cetinkunt, S. and Yu, W.-L. Closed-loop behavior of a feedback-controlled flexible arm: a comparative study 10:3 pp. 263–275.

The International Journal of
Robotics Research

Author Index Volumes 6 to 10

Abdel-Rahman, T. M. A generalized practical method for analytic solution of the constrained inverse kinematics problem of redundant manipulators 10:4 pp. 382–395.

Agapakis, J. E. Approaches for recognition and interpretation of workpiece surface features using structured lighting 9:5 pp. 3–16.

Agapakis, J. E., Katz, J. M., Friedman, J. M. and Epstein, G. N. Vision-aided robotic welding: an approach and a flexible implementation 9:5 pp. 17–34.

Alexander, J. C. and Maddocks, J. H. On the kinematics of wheeled mobile robots 8:5 pp. 15–27.

Alexander, R. McN. Three uses for springs in legged locomotion 9:2 pp. 53–61.

Allen, P. K. Integrating vision and touch for object recognition tasks 7:6 pp. 15–33.

Amin-Javaheri, M. and Orin, D. E. Parallel algorithms for computation of the manipulator inertia matrix 10:2 pp. 162–170.

An, C. H. and Hollerbach, J. M. The role of dynamic models in Cartesian force control of manipulators 8:4 pp. 51–72.

Anderson, K. and Angeles, J. Kinematic inversion of robotic manipulators in the presence of redundancies 8:6 pp. 80–97.

Angeles, J. and Ma, O. Dynamic simulation of n-axis serial robotic manipulators using a natural orthogonal complement 7:5 pp. 32–47.

Arkin, R. C. Motor schema-based mobile robot navigation 8:4 pp. 92–112.

Armstrong, B. On finding exciting trajectories for identification experiments involving systems with nonlinear dynamics 8:6 pp. 28–48.

Aronov, B., Fortune, S. and Wilfong, G. Minimum-speed motions 10:3 pp. 228–239.

Ayache, N. and Faugeras, O. D. Building, registrating and fusing noisy visual maps 7:6 pp. 45–65.

Bajaj, C. and Kim, M.-S. Generation of configuration space obstacles: moving algebraic surfaces 9:1 pp. 92–112.

Bajaj, C. and Moh, T. T. Generalized unfoldings for shortest paths 7:1 pp. 71–76.

Baker, D. R. and Wampler, C. W. On the inverse kinematics of redundant manipulators 7:2 pp. 3–21.

Barraquand, J. and Latombe, J.-C. Robot motion planning: a distributed representation approach 10:6 pp. 628–649.

Basu, A. and Aloimonos, J. A. robust, correspondenceless, translation-determining algorithm 9:5 pp. 35–59.

Bayo, E., Papadapoulos, P., Stubbe, J. and Serna, M. A. Inverse dynamics and kinematics of multi-link elastic robots: an iterative frequency domain approach 8:6 pp. 49–62.

Baz, A. and Gumusel, L. Buoyancy- and gravity-powered underwater robots 9:5 pp. 60–69.

Berger, A. D. and Kholsa, P. K. Using tactile data for real-time feedback 10:2 pp. 88–102.

Bobrow, James E. A direct minimization approach for obtaining the distance between convex polyhedra 8:3 pp. 65–76.

Borm, J.-H. and Menq, C.-H. Determination of optimal measurement configurations for robot calibration based on observability measure 10:1 pp. 51–63.

Brost, R. C. Automatic grasp planning in the presence of uncertainty. 7:1 pp. 3–17.

Buchal, R. O., Cherchas, D. B., Sassani, F. and Duncan, J. P. Simulated off-line programming of welding robots 8:3 pp. 31–43.

Buckley, Charles E. A foundation for the "flexible-trajectory" approach to numeric path planning 8:3 pp. 44–64.

Buckley, S. J. Planning compliant motion strategies 8:5 pp. 28–44.

Burger, W. and Bhanu, B. Qualitative understanding of scene dynamics for mobile robots 9:6 pp. 74–90.

Byrd, J. S. and DeVries, Kevin R. A six-legged telerobot for nuclear applications development 9:2 pp. 43–52.

Cameron, A. and Durrant-Whyte, H. F. A Bayesian approach to optimal sensor placement 9:5 pp. 70–88.

Cameron, S. Efficient intersection tests for objects defined constructively 8:1 pp. 3–25.

Canudas de Wit, E., Noel, P., Aubin, A. and Brogliato, B. Adaptive friction compensation in robot manipulators: low velocities 10:3 pp. 189–199.

Cetinkunt, S. and Yu, W.-L. Closed-loop behavior of a feedback-controlled flexible arm: a comparative study 10:3 pp. 263–275.

Chiacchio, P., Chiaverini, S., Sciavicco, L. and Siciliano, B. 10:4 pp. 410–425.
Chiang, W.-W., Kraft, R. and Cannon, R. H. Design and experimental demonstration of rapid, precise end-point control of a wrist carried by a very flexible manipulator 10:1 pp. 30–40.
Chiu, S. L. Task compatibility of manipulator postures 7:5 pp. 13–21.
Chou, J. C. K. and Kamel, M. Finding the position and orientation of a sensor on a robot manipulator using quaternions 10:3 pp. 240–254.
Choudhury, A. and Genin, J. Kinematics of an n-degree-of-freedom multi-link robotic system 8:6 pp. 132–140.
Chung, J. C. H. and Leininger, G. G. Task-level adaptive hybrid manipulator control 9:3 63–73.
Cloutier, G. M. and Betemps, M. "Tabulation of the symbolic midframe Jacobian of a robot manipulator" by K. L. Doty 9:1 pp. 145–146.
Coito, F. J. and Lemos, J. M. A long-range adaptive controller for robot manipulators 10:6 pp. 684–707.
Cox, I. J. and Gehani, N. H. Concurrent programming and robotics 8:2 pp. 3–16.
Craig, J. J., Hsu, P. and Sastry, S. S. Adaptive control of mechanical manipulators. 6:2 pp. 16–28.
Dario, P. and Buttazzo, G. An anthropomorphic robot finger for investigating artificial tactile perception. 6:3 pp. 25–48.
De Schutter, J. and Van Brussel, H. Compliant robot motion II. A control approach based on external control loops 7:4 pp. 18–33.
De Schutter, J. and Van Brussel, H. Compliant robot motion I. A formalism for specifying compliant motion tasks 7:4 pp. 3–17.
Donald, B. R. Planning multi-step error detection and recovery strategies 9:1 pp. 3–60.
Doty, K. L. Tabulation of the symbolic midframe Jacobian of a robot manipulator 6:4 pp. 85–97.
Durrant-Whyte, H. F. Consistent integration and propagation of disparate sensor observations 6:3 pp. 3–24.
Durrant-Whyte, H. F. Sensor models and multisensor integration 7:6 pp. 97–113.
Ellison, D. On the convergence of the multidimensional Albus Perceptron 10:4 pp. 338–357.
Etesami, F. Position tolerance verification using simulated gaging 10:4 pp. 358–370.
Everett, L. J. Forward calibration of closed-loop jointed manipulators 8:4 pp. 85–91.
Faessler, H. Manipulators constrained by stiff contact: dynamics, control and experiments 9:4 pp. 40–58.
Fanghella, P. and Galletti, C. Kinematics of robot mechanisms with closed actuating loops 9:6 pp. 19–24.
Fearing, R. S. Tactile sensing mechanisms 9:3 pp. 3–23.
Fisher, R. B. and Orr, M. J. L. Geometric reasoning in a parallel network 10:2 pp. 103–122.
Flash, T. and Potts, R. B. Discrete trajectory planning 7:5 pp. 48–57.
Flynn, A. M. Combining sonar and infrared sensors for mobile robot navigation 7:6 pp. 5–14.
Freeman, P. S. and Orin, D. E. Efficient dynamic simulation of a quadruped using a decoupled tree-structure approach 10:6 pp. 619–627.
Freund, E. and Hoyer, H. Real-time pathfinding in multiroot systems including obstacle avoidance 7:1 pp. 42–70.
Furusho, J. and Sano, A. Sensor-based control of a nine-link biped 9:2 pp. 83–98.
Geffin, S. and Furht, B. A dataflow multiprocessor system for robot arm control 9:3 pp. 93–102.
Ghosal, A. and Roth, B. A new approach for kinematic resolution of redundancy 7:2 pp. 22–35.
Gorinevsky, D. M. and Shneider, A. Yu. Force control in locomotion of legged vehicles over rigid and soft surfaces 9:2 pp. 4–23.
Gottschalk, P. G., Turney, J. L. and Mudge, T. N. Efficient recognition of partially visible objects using a logarithmic complexity matching technique 8:6 pp. 110–131.
Grupen, R. A., Henderson, T. C. and McCammon, I. D. A survey of general-purpose manipulation 8:1 pp. 38–62.
Hager, G. and Mintz, M. Computational methods for task-directed sensor planning 10:4 pp. 285–313.
Han, J. Y., Hemami, H. and Yurkovich, S. Nonlinear adaptive control of an N-link robot with unknown load 6:3 pp. 71–86.
Hashimoto, K., Ohashi, K. and Kimura, H. An implementation of a parallel algorithm for real-time model-based control on a network of microprocessors 9:6 pp. 37–47.
Hashimoto, K. and Kimura, H. A new parallel algorithm for inverse dynamics 8:1 pp. 63–76.
Henderson, T., Weitz, E., Hansen, C. and Mitiche, A. Multisensor knowledge systems: interpreting 3D structure 7:6 pp. 114–137.
Hirose, S. and Kunieda, O. Generalized standard foot trajectory for a quadruped walking vehicle 9:6 pp. 3–12.
Hirose, S. and Morishima, A. Design and control of a mobile robot robot with an artificial body 9:2 pp. 99–114.
Hodgins, J. K. and Raibert, M. H. Biped gymnastics 9:2 pp. 115–132.
Hopcroft, J. E., Kearney, J. K. and Krafft, D. B. A case study of flexible object manipulation 10:1 pp. 41–50.
Hunt, K. H., Samuel, A. E. and McAree, P. R. Special configurations of multi-finger, multi-freedom grippers—a kinematic study 10:2 pp. 123–134.

Ikeuchi, K. Determining a depth map using a dual photometric stereo 6:1 pp. 15–31.
Illari, J. and Torras, C. 2D path planning: a configuration space heurisitic approach 9:1 pp. 75–91.
Ishii, M., Sakane, S., Mikami, Y. and Kakikura, M. A 3-D sensor system for teaching robot paths and environments 6:2 pp. 45–49.
Izaguirre, E., Pu, P. and Summers, J. A new development in camera calibration: calibrating a pair of mobile cameras 6:3 pp. 104–115.
Jonker, B. A finite element dynamic analysis of flexible manipulators 9:4 pp. 59–74.
Ju, M. S. and Mansour, J. M. Comparison of methods for developing the dynamics of rigid-body systems 8:6 pp. 19–27.
Kazerounian, K. and Wang, Z. Global versus local optimization in redundancy resolution of robotic manipulators 7:5 pp. 3–12.
Khosla, P. K. and Kanade, T. Experimental evaluation of non-linear feedback and feedforward control schemes for manipulators 7:1 pp. 18–28.
Kirchner, H. O. K., Gurumoorthy, B. and Prinz, F. B. A perturbation approach to robot calibration 6:4 pp. 47–59.
Klein, C. A. and Blaho, B. E. Dexterity measures for the design and control of kinematically redundant manipulators 6:2 pp. 72–83.
Klein, C. A. and Miklos, T. A. Spatial robotic isotropy 10:4 pp. 426–437.
Koditschek, D. E. and Bühler, M. Analysis of a simplified hopping robot 10:6 pp. 587–605.
Kuc, R. and Viard, V. B. A physically based navigation strategy for sonar-guided vehicles 10:2 pp. 75–87.
Kuribayashi, K. Improvement of the response of an SMA actuator using a temperature sensor 10:1 pp. 13–20.
Lapshin, V. V. Motion control of a legged machine in the supportless phase of hopping 10:4 pp. 327–337.
Leahy, M. B. Compensation of industrial manipulator dynamics in the presence of variable payload 9:4 pp. 86–98.
Leahy, M. B. and Saridis, G. N. Compensation of industrial manipulator dynamics 8:4 pp. 73–84.
Lee, J.-J. and Tsai, L.-W. The structural synthesis of tendon-driven manipulators having a pseudotriangular structure matrix 10:3 pp. 255–262.
Li, C.-J., Hemami, A. and Sankar, T. S. A new computational method for linearized dynamic models for robot manipulators 9:1 pp. 134–144.
Li, Z., Hsu, P. and Sastry, S. Grasping and coordinated manipulation by a multifingered robot hand 8:4 pp. 33–50.
Liao, D. X., Sung, C. K. and Thompson, B. S. The design of flexible robotic manipulators with optimal arm geometries fabricated from composite laminates with optimal material properties 6:3 pp. 116–130.
Lilly, K. W. and Orin, D. E. Alternate formulations for the manipulator inertia matrix 10:1 pp. 64–74.
Litvin, F. L. and Tan, J. Singularities in motion and displacement functions of constrained mechanical systems 8:2 pp. 30–43.
Longman, R. W., Lindberg, R. E. and Zedd, M. F. Satellite-mounted robot manipulators—new kinematics and reaction moment compensation 6:3 pp. 87–103.
Luh, J. Y. S. and Zheng, Y. F. Constrained relations between two coordinated industrial robots for motion control 6:3 pp. 60–70.
Lumelsky, V. and Sun, K. A unified methodology for motion planning with uncertainty for 2D and 3D two-link robot arm manipulators 9:5 pp. 89–104.
Maciejewski, A. A. and Klein C. A. The singular value decomposition: computation and applications to robotics 8:6 pp. 63–79.
Manseur, R. and Doty, K. L. A fast algorithm for inverse kinematic analysis of robot manipulators 7:3 pp. 52–63.
Manseur, R. and Doty, K. L. A robot manipulator with 16 real inverse kinematic solution sets 8:5 pp. 75–78.
Markenscoff, X. and Papadimitriou, C. H. Optimum grip of a polygon 8:2 pp. 17–29.
Markenscoff, Xanthippi, Ni, Luqun and Papadimitriou, Christos H. The geometry of grasping 9:1 pp. 61–74.
Matsuno, F., Fukushima, S., Ohsawa, Y., Kiyohara, M. and Sakawa, Y. Feedback control of flexible manipulator with a parallel drive mechanism 6:4 pp. 76–84.
McGeer, T. Passive dynamic walking 9:2 pp. 62–82.
Merlet, J.-P. Singular configurations of parallel manipulators and Grassmann geometry 8:5 pp. 45–56.
Middleton, R. H., Goodwin, G. C. and Longman, R. W. A method for improving the dynamic accuracy of a robot performing a repetitive task 8:5 pp. 67–74.
Miller, W. T., Glanz, F. H. and Kraft, L. G. Application of a general learning algorithm to the control of robotic manipulators 6:2 pp. 84–98.
Montana, D. J. The kinematics of contact and grasp 7:3 pp. 17–32.
Naganathan, G. and Soni, A. H. Coupling effects of kinematics and flexibility in manipulators 6:1 pp. 75–84.
Nakamura, Y., Hanafusa, H. and Yoshikawa, T. Task-priority based redundancy control of robot manipulators 6:2 pp. 3–15.
Nakamura, Y., Nagai, K. and Yoshikawa, T. Dynamics and stability in coordination of multiple robotic mechanisms 8:2 pp. 44–61.
Natarajan, B. K. Some paradigms for the automated design of parts feeders 8:6 pp. 98–109.
Natarajan, B. K. The complexity of fine motion planning 7:2 pp. 36–42.

Newman, W. S. and Branicky, M. S. Real-time configuration space transforms for obstacle avoidance 10:6 pp. 650–667.
Nguyen, V.-D. Constructing force-closure grasps 7:3 pp. 3–16.
Nguyen, V.-D. Constructing stable grasps 8:1 pp. 26–37.
Nicholls, H. R. and Lee, M. H. A survey of robot tactile sensing technology 8:3 pp. 3–30.
Niemeyer, G. and Slotine, J.-J. E. Performance in adaptive manipulator control 10:2 pp. 149–161.
Nye, T. W., LeBlanc, D. J. and Cipra, R. J. Design and modeling of a computer-controlled planar manipulator 6:1 pp. 85–95.
Okada, T. and Kanade, T. A three-wheeled self-adjusting vehicle in a pipe, FERRET-1 6:4 pp. 60–75.
Oommen, B. J., Andrade, N. and Iyengar, S. S. Trajectory planning of robot manipulators in noisy work spaces using stochastic automata 10:2 pp. 135–148.
Paden, B. and Sastry, S. Optimal kinematic design of 6R manipulators 7:2 pp. 43–61.
Pai, D. K. and Leu, M. C. Uncertainty and compliance of robot manipulators with applications to task feasibility 10:3 pp. 200–213.
Park, H. S. and Cho, H. S. General design conditions for an ideal robotic manipulator having simple dynamics 10:1 pp. 21–29.
Pennock, G. R. and Vierstra, B. C. The inverse kinematics of a three-cylindric robot 9:4 pp. 75–85.
Pollard, S. B., Pridmore, T. P., Porrill, J., Mayhew, J. E. W. and Frisby, J. P. Geometrical modeling from multiple stereo views 8:4 pp. 3–32.
Porrill, J. Optimal combination and constraints for geometrical sensor data 7:6 pp. 66–77.
Pradeep, A. K., Yoder, P. J. and Mukundan, R. On the use of dual-matrix exponentials in robotic kinematics 8:5 pp. 57–66.
Pugh, D. R., Ribble, E. A., Vohnout, V. J., Bihari, T. E., Walliser, T. M., Patterson, M. R. and Waldron, K. J. Technical description of the adaptive suspension vehicle 9:2 pp. 24–42.
Ramsli, E. Probability distribution of repeatability of industrial robots 10:3 pp. 276–283.
Richardson, J. M. and Marsh, K. A. Fusion of multisensor data 7:6 pp. 78–96.
Rodriguez, G., Kreutz-Delgado, K. and Jain, A. A spatial operator algebra for manipulator modeling and control 10:4 pp. 371–381.
Romdhane, L. and Duffy, J. Kinestatic analysis of multifingered hands 9:6 pp. 3–18.
Rovner, D. M. and Cannon, R. H. Experiments toward on-line identification and control of a very flexible one-link manipulator 6:4 pp. 3–19.
Rowe, N. C. Roads, rivers and obstacles: optimal two-dimensional path planning around linear features for a mobile agent 9:6 pp. 67–73.
Rowe, N. C. and Richbourg, R. F. An efficient Snell's Law method for optimal-path planning across multiple two-dimensional, irregular, homogeneous-cost regions 9:6 pp. 48–66.
Sadegh, N. and Horowitz, R. Stability and robustness analysis of a class of adaptive controllers for robotic manipulators 9:3 74–92.
Schwartz, J. T. and Sharir, M. Identification of partially obscured objects in two and three dimensions by matching noisy characteristic curves. 6:2 pp. 29–44.
Selig, J. M. and Rooney, J. Reuleaux pairs and surfaces that cannot be gripped 8:5 pp. 79–86.
Shamir, T. The singularities of redundant robot arms 9:1 pp. 113–121.
Shekhar, S., Khatib, O. and Shimojo, M. Object localization with multiple sensors 7:6 pp. 34–44.
Sheu, S.-Y. and Walker, M. W. Identifying the independent inertial parameter space of robot manipulators 10:6 pp. 668–683.
Shih, L., Frank, A. A. and Ravani, B. Dynamic simulation of legged machines using a compliant joint model 6:4 pp. 33–46.
Shiller, Zvi and Dubowsky, Steven. Robot path planning with obstacles, actuator, gripper and payload constraints 8:6 pp. 3–18.
Siciliano, Bruno and Book, Wayne J. A singular perturbation approach to control of lightweight flexible manipulators 7:4 pp. 79–90.
Sinden, F. W. The tethered robot problem 9:1 pp. 122–133.
Singh, S. K. and Leu, M. C. Manipulator motion planning in the presence of obstacles and dynamic constraints 10:2 pp. 171–187.
Skaar, S. B., Brockman, W. H. and Jang, W. S. Three-dimensional camera space manipulation 9:4 pp. 22–39.
Skarr, S. B., Brockman, W. H. and Hanson, R. Camera-space manipulation 6:4 pp. 20–32.
Slotine, J.-J. E. and Li, W. On the adaptive control of robot manipulators 6:3 pp. 49–59.
Song, S.-M. and Waldron, W. An analytical approach for gait study and its applications on wave gaits 6:2 pp. 60–71.
Speeter, T. H. A tactile sensing system for robotic manipulation 9:6 pp. 25–36.
Stanisic, M. M. Coordinate systems and the inverse velocity problem of manipulators with spherical wrists 7:2 pp. 62–63.
Stanisic, M. M., Pennock, G. R. and Krousgrill, C. M. Inverse velocity and acceleration solutions of serial robot arm subassemblies using the canonical coordinate system 7:1 pp. 29–41.

Stanfield, S. A. A robotic perceptual system utilizing passive vision and active touch 7:6 pp. 138–161.
Stansfield, S. A. Robotic grasping of unknown objects: a knowledge-based approach 10:4 pp. 314–326.
Steer, B. Trajectory planning for a mobile robot 8:5 pp. 3–14.
Sturges, R. H. A three-dimensional assembly task quantification with application to machine dexterity 7:4 pp. 34–78.
Sturges, R. H. A quantification of machine dexterity applied to an assembly task 9:3 pp. 49–62.
Trinkle, J. C., Abel, J. M. and Paul, R. P. An investigation of frictionless enveloping grasping in the plane 7:3 pp. 33–51.
Trinkle, J. C. and Paul, R. P. Planning for dexterous manipulation with sliding contacts 9:3 pp. 24–48.
Vafa, Z. and Dubowsky, S. The kinematics and dynamics of space manipulators: the virtual manipulator approach 9:4 pp. 3–21.
Vaishnav, R. N. and Magreb, E. B. A general procedure to evaluate robot positioning errors 6:1 pp. 59–74.
Vakakis, A. F., Burdick, J. W. and Caughey, T. K. An "interesting" strange attractor in the dynamics of a hopping robot 10:6 pp. 606–618.
Vukobratovic, M., Kircanski, N. and Gang, L. S. An approach to parallel processing of dynamic robot models 7:2 pp. 64–71.
Walker, I. D., Freeman, R. A. & Marcus, S. I. Analysis of motion and internal loading of objects grasped by multiple cooperating manipulators 10:4 pp. 396–409.
Wampler, C. W. Winding number analysis of invertible workspaces for redundant manipulators 7:5 pp. 22–31.
Warren, C. W., Danos, J. C. and Mooring, B. W. An approach to manipulator path planning 8:5 pp. 87–93.
Weld, J. D. and Leu, M. C. Geometric representation of swept volumes with application to polyhedral objects 9:5 pp. 105–117.
Wenger, P. and Chedmail, P. Ability of a robot to travel through its free work space in an environment with obstacles 10:3 pp. 214–227.
Whitney, D. E. Historical perspective and state of the art in robot force control 6:1 pp. 3–14.
Yin, B. Using vision data in an object-level robot language–RAPT 6:1 pp. 43–58.